

**IMPROVED METHOD AND APPARATUS FOR
IMPLEMENTATION OF A ZERO FORCING EQUALIZER**

ABSTRACT

5 An equalizing apparatus includes an equalizer which has a plurality of adjustable tap
weights that equalizes a received signal based on values of the adjustable tap weights, a tap
weight update calculation unit coupled to the equalizer and which determines tap weight
updates for use in adjusting the tap weights during operation of the equalizer, an offset
memory that stores one or more tap weight update offset values and a summer coupled to the
tap weight update calculation unit and to the offset memory. The summer combines each of
10 the tap weight updates with one of the tap weight update offset values to produce modified
tap weight updates which, in turn, are provided to the equalizer to adjust the tap weights.